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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,725	07/22/2003	Ting-Yu Lin	0941-0795P	6083
2292 7590 08/13/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER VU, MICHAEL T				
ART UNIT 2617		PAPER NUMBER		
NOTIFICATION DATE 08/13/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/623,725

Applicant(s)

LIN ET AL.

Examiner

MICHAEL T. VU

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-33 and 36-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 33 and 36 is/are rejected.
- 7) ☒ Claim(s) 5-32, 37-53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 4-33, and 36-53 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 33, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorensen (US 2002/0061009) in view of Fontana (US 2003/0117946).

Regarding claims 1 and 33, Sorensen teaches a Bluetooth network (Figure #2, [0001-0006]) processing method, comprising: providing a plurality of piconets [0002-0011], each of which comprises a plurality of Bluetooth units [0002-0011], including one master unit [0004-0006] and a plurality of slave units [0004-0006]; and linking the piconets using the slave units to form a scatternet ring [0024-0027], wherein the slave units act as a bridge to connect the piconets (Figure #2, and Figure #6, [0005-0009, 0015-0022]) ; wherein the piconet linking step uses a centralized formation mechanism to form the scatternet ring [0005-0009, 0015-0022], and

But Sorensen does not clearly teach the scatternet ring is a closed single-ring Bluetooth network connected by a circle of piconets.

However, Fontana teaches the scatternet ring is a closed single-ring Bluetooth network connected by a circle of piconets [0034-0035, 0061-0076, 0090-0092].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sorensen, with Fontana's teaching, in order to ensure optimizing the routing packet transmission in an ad hoc and/or short range network topologies.

Regarding claims 4 and 36, Sorensen and Fontana teach the method as claimed in claim [[3]]1, wherein the piconet comprises a master unit [0004-0006], a downstream bridge (Figures #2, Piconets #5, Piconet #7) and an upstream bridge (Figures #2, Piconets #5, Piconet #7, and [0005-0009, 0015-0022]) all of Sorensen.

Allowable Subject Matter

4. Claims 5-32 and 37-53, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten **claims 5-32 and 37-53** in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 5 and 37, the prior art of record fails to teach alone or in combination the method as claimed in claims 4 and 36, further comprising the step of appending a plurality of control bit fields to a packet payload for routing the packet from its source to its destination, wherein the control bit fields comprise a relay bit field, a dirty bit field, a broadcast bit field, a source address field and a destination address field.

Dependent claims 6-32, and 38-53 are allowable for the same reason as set forth

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael Vu/
Examiner
AU-2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617